City of Carlsbad

Development Services
Building Division
1635 Faraday Avenue
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NONRESIDENTIAL GREEN BUILDING CODE STANDARDS MANDATORY MEASURES CERTIFICATION CHECKLIST B-52

Application Checklist for BSC	Mandatory
Site Development	
5.106.1 Storm water pollution prevention plan. For projects of one acre or less, develop a Storm Water Pollution Prevention Plan (SWPPP) that has been designed specific to its site, conforming to the State Storm water NPDES Construction Permit or local ordinance, whichever is stricter, as is required for projects over one acre. The plan should cover prevention of soil loss by storm water run-off and/or wind erosion, of sedimentation and/or of dust/particulate matter air pollution.	(✕)
5.106.4 Bicycle parking and changing rooms. Comply with Sections 5.106.4.1 and **5.106.4.2**; or meet local ordinance, whichever is stricter. **5.106.4.1 Short-Term bicycle parking**. If the project is expected to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitor's entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack. **5.106.4.2 Long Term bicycle parking.** For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space.	(✕) (✕) (✕)
5.106.5.2 Designated parking. Provide designated parking for any combination of low emitting, fuel-efficient and carpool/van pool vehicles as shown in Table A5.106.5.3.1.	(✕)
5.106.8 Light pollution reduction. Comply with lighting power requirements in the *California Energy Code* and design interior lighting such that zero direct-beam illumination leaves the building site. Meet or exceed exterior light levels and uniformity ratios for lighting zones 1-4 as defined in Chapter 10 of the *California Administrative Code,* using the following strategies: 1. Shield all exterior luminaries or use cutoff luminaries 2. Contain interior lighting within each source 3. Allow no more than .01 horizontal foot candle 15 ft beyond the site 4. Contain all exterior lighting within property boundaries **Exception:** See part 2, Chapter 12, Section 1205.6 for campus lighting requirements for parking facilities and walkways.	(✕) (✕) (✕) (✕) (✕)
5.106.10 Grading and paving. The site shall be planned and developed to keep surface water away from buildings. Construction plans shall indicate how site grading or drainage system will manage all surface water flows.	(✕)
Water Efficiency and Conservation	
Indoor Water Use	
5.303.1 Meters. Separate meters shall be installed for the uses described in Sections 503.1.1 through 503.1.3. **5303.1.1 Buildings in excess of 50,000 square feet**. Separate sub-meters shall be installed as follows: 1. For each individual leased, rented, or other tenant space within the building projected to consume more than 100 gal/day. 2. For spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory or beauty salon or barber shop projected to consume more than 100 gal/day.	(✕) (✕)

5.303.1.2 Excess consumption. Any building within a project or space within a building that is projected to consume more than 1,000 gal/day.	(✕)
5.303.2 20 Percent savings. A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by 20 percent shall be provided (Calculate savings by Water Use Worksheets or utilize Table 5.303.2.3). **5.303.2.1 Multiple showerheads serving one shower.** When single shower fixtures are served by more than one showerhead, the combined flow rate of all the showerheads shall not exceed the maximum flow rates specified in the 20 percent reduction column contained in Table 5.303.2.3 or the shower shall be designed to allow only one showerhead to be in operation at a time.	(✕) (✕)
5.303.4 Wastewater reduction. Each building shall reduce the generation of wastewater by one of the following methods: 1. The installation of water-conserving fixtures 2. Utilizing nonpotable water systems	As applicable (✕) (✕)
5.303.6 Plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the requirements listed for each type in items listed in Table 5.303.6. 1. Water closets (toilets) – flushometer type 2. Water closets (toilets) – tank type 3. Urinals 4. Public lavatory faucets 5. Public metering self-closing faucets 6. Residential bathroom lavatory sink faucets 7. Residential bathroom lavatory sinks 8. Residential showerheads 9. Single shower fixtures served by more than one showerhead	As applicable (✕) (✕) (✕) (✕) (✕) (✕) (✕) (✕) (✕)
Outdoor Water Use	
5.304.1 Water Budget. A water budget shall be developed for landscaping irrigation use. **5.304.2 Outdoor potable water use.** For new water service, separate meters or submeters shall be installed for indoor and outdoor potable water use for landscaped areas between 1,000 and 5,000 square feet.	(✕) (✕)
5.304.3 Irrigation design. In new nonresidential projects with between 1,000 and 2,500 square feet of landscaped area (the level at which the MLO applies), install irrigation controllers and sensors which include the following criteria and meet manufacturer's recommendations. **5.304.1.1 Irrigation controllers.** Automatic irrigation system controllers installed at the time of final inspection shall comply with the following: 1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plant's needs as weather conditions change. 2. Weather based controllers without integral rain sensors or communication systems that account for local rainfall shall have separate wired or wireless rain sensors which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.	 (✕) As applicable (✕)
Construction Waste Reduction, Disposal and Recycling	
5.408.1 Construction waste diversion. Establish a construction waste management plan or meet local ordinance, whichever is more stringent. **5.408.2 Construction waste management plan**. Submit plan per this section to enforcement authority within the city. **5.408.2.1 Documentation**. Provide documentation of the waste management plan that meets the requirements listed in Section 5.408.2 Items 1 thru 4 and the plan is accessible to the enforcement authority. **5.408.2.2 Isolated jobsites**. The enforcing agency may make exceptions to the requirements of this section when jobsites are located in areas beyond the haul boundaries of the diversion facility.	(✕) (✕) (✕)

5.408.3 Construction waste. Recycle and/or salvage for reuse a minimum of 50 percent of nonhazardous construction and demolition debris or meet local ordinance, whichever is more stringent. Exceptions: 1. Excavated soil and land-clearing debris 2. Alternate waste reduction methods, developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist. **5.408.4 Excavated soil and land clearing debris**. 100 percent of trees. Stumps, rocks ad associated vegetation and soils resulting primarily from land clearing shall be reused or recycled.	(✕)
Building Maintenance and Operation	
5.410.1 Recycling by occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling.	(✕)
5.410.2 Commissioning. For new buildings 10,000 square feet and over, building commissioning for all building systems covered by T24, Part 6, process systems and renewable energy systems shall be included in the design and construction processes of the building project. Commissioning requirements shall include items listed in Section 5.410.2.	(✕)
5.410.2.1 Owner's Project Requirements (OPR). Documented before the design phase of the project begins the OPR shall include items listed in Section 5.410.4.	(✕)
5.410.2.2 Basis of Design (BOD). A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project and updated periodically to cover the systems listed in Section 5.410.2.2.	(✕)
5.410.2.3 Commissioning plan. A commissioning plan describing how the project will be commissioned shall be started during the design phase of the building project and shall include items listed in Section 5.410.2.3.	(✕)
5.410.2.4 Functional performance testing shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the approved plans and specifications.	(✕) (✕)
5.410.2.5 Documentation and training. A Systems manual and systems operations training are required.	
5.410.2.5.1 Systems manual. The systems manual shall be delivered to the building owner or representative and facilities operator and shall include the items listed in Section 5.410.2.5.1.	(✕)
5.410.2.5.2 Systems operations training. The training of the appropriate maintenance staff for each equipment type and/or system shall include items listed in Section 5.410.2.5.2.	(✕)
5.410.2.6 Commissioning report. A complete report of commissioning process activities undertaken through the design, construction and reporting recommendations for post construction phases of the building project shall be completed and provided to the owner or representative.	(✕)
5.410.4 Testing and adjusting. Testing and adjusting of systems shall be required for buildings less than 10,000 square feet.	(✕)
5.410.4.2 Systems. Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include, as applicable to the project, the systems listed in Section 5.410.3.2.	(✕)
5.410.4.3 Procedures. Perform testing and adjusting procedures in accordance with industry best practices and applicable national standards on each system.	(✕)
5.410.4.3 HVAC balancing. Before a new space-conditioned system serving a building or space is operated for normal use, the system should be balanced in accordance with the procedures defined by national standards listed in Section 5.410.3.3.1.	(✕)
5.410.4.4 Reporting. After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing those services. maintenance instructions and copies of guaranties/warranties for each system prior to final inspection.	(✕) (✕)
5.410.4.5 Operation and maintenance manual. Provide the building owner with detailed operating and maintenance manual **5.410.4.5.1 Inspection and reports**. Include a copy of all inspection verifications and reports required by the enforcing agency.	

Environmental Quality	
Fireplaces	
5.503.1 Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace or a sealed woodstove and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150. **5.503.1.1** Woodstoves. Woodstoves shall comply with US EPA Phase II emission limits.	(✕) As Applicable (✕)
Weather Resistance and Moisture Management	
5.407.1 Weather protection. Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1403.2 and California Energy Code Section 150, manufacturer's installation instruction instructions or local ordinance, whichever is more stringent. **5.407.2 Moisture control**. Employ moisture control measured by the following methods: **5.407.2.1 Sprinklers**. Prevent irrigation spray on structures. **5.407.2.2 Entries and openings**. Design exterior entries and openings to prevent water intrusion into buildings.	(✕) (✕) (✕)
Pollution Control	
5.504.3 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation or during storage on the construction site and until final start up of the heating and cooling equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods to reduce the amount of debris or duct which may collect in the system.	(✕)
5.504.5.3 Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with outside and return air prior to occupancy that provides at least a MERV of 8.	
5.504.4 Finish material pollutant control. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.4 **5.504.4.1 Adhesives, sealants, caulks.** Adhesives and sealants used on the project shall meet the requirements of the following standards: 1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits as shown in Tables 5.504.4.1 and 5.504.4.2. 2. Aerosol adhesives and smaller unit sizes of adhesives and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with Section 94507. **5.504.4.3 Paint and coatings.** Architectural paints and coatings shall comply with Table 5.504.4.3 **5.504.4.3.1 Aerosol paints and coatings.** Aerosol paints and coatings shall meet the Product-Weighted MIR limits for ROC in Section 94522 (a)(3) and other requirements, including prohibition on use of certain toxic compounds and ozone depleting substances (CCR, Title 17, Section 94520 et seq.). **5.504.4 Carpet systems.** All carpet installed in the building interior shall meet the testing and product requirements of one of the standards listed in Section 5.504.4.4. **50504.4.4.1 Carpet cushion.** All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label Program. **5.504.4.4.2 Carpet adhesive.** All carpet adhesive shall meet the requirements of Table 804.4.1. **5.504.4.5 Composite wood products.** Hardwood, plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in Table 5.504.4. **5.504.4.5.2 Documentation.** Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following: 1. Product certification and specifications 2. Chain of custody certifications 3. Other methods acceptable to the enforcing agency **5.504.4.6 Resilient flooring systems.** Comply with the VOC emission limits defined in the 2009 CHPS criteria and listed on its Low-emitting Materials List (or product registry) or certified under the FloorScore program of the Resilient Floor Covering Institute.	(✕) (✕)

Indoor Moisture and Radon Control	
5.505.1 Indoor moisture control. Buildings shall meet or exceed the provisions of the California Building Code, Title 24 Part 2, Sections 1203 (Ventilation) Chapter 14.1.	(✕)
Air quality and Exhaust	
5.506.1 Outside air delivery. For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 121 of the California Energy Code, CCR, Title 24, Part 6 and Chapter 4 of CCR, Title 8 or the applicable local code, whichever is more stringent. **5.506.2 Carbon DIOXIDE (CO2) monitoring.** For buildings equipped with demand control ventilation, CO2 sensors and ventilation controls shall be specified and installed in accordance with the requirements of the latest edition of the California Energy Code, Title 24, Part 6, Section 121(c).	(✕) (✕)
Outdoor Air Quality	
5.508.1 Ozone depletion and global warming reductions. Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2. **5.508.1 CFCs.** Install HVAC and refrigeration equipment that does not contain CFCs. **5.508.1.2 Halons.** Install fire suppression equipment that does not contain Halons.	As applicable (✕) (✕)

I, as the professional responsible for this project, certify that, to the best of my knowledge, the mandatory items listed on this form have been incorporated into the project in order to comply with Title 24, Part 11 of the 2013 California Green Building Standards.

Project Address: _____Plan Check Number: _____

Print Name: _____ Signed: _____

License Number: _____ Date: _____